

# TomoTherapy<sup>®</sup> Treatment Plan for Prostate Cancer

This simulated treatment plan demonstrates how the TomoTherapy<sup>®</sup> Hi·Art<sup>®</sup> treatment system can be used to focus the radiation dose on the target area of the prostate, while avoiding sensitive structures close by.

## The Plan

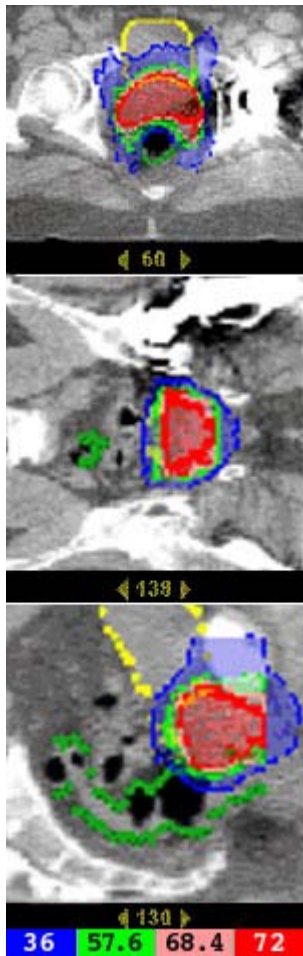


Figure 1: TCS views of *TomoTherapy* treatment plan for prostate cancer.

Figure 1 shows transverse, coronal and sagittal (TCS) image planes in a prostate cancer treatment plan. Colors show the planned dose distribution overlaid on the images. The plan involves irradiating the prostate with a dose high enough to control the cancer while limiting dose to the bladder and rectum. One of the biggest challenges for treating prostate cancer is movement of the target area from day to day due to influences such as rectal and bladder filling. The *TomoTherapy Hi·Art* treatment system's on-board CTrue<sup>™</sup> imaging capability helps ensure the prostate is accurately positioned every day.

## The Goals

- Prostate: 72 Gy to at least 98% of its volume
- Rectum: no more than 20% of the rectum to receive more than 36 Gy
- Bladder: no more than 30% of the bladder to receive more than 36 Gy

## The Results

The Dose Volume Histogram in Figure 2 demonstrates how the *TomoTherapy Hi-Art* treatment system is able to meet or exceed each of these objectives.

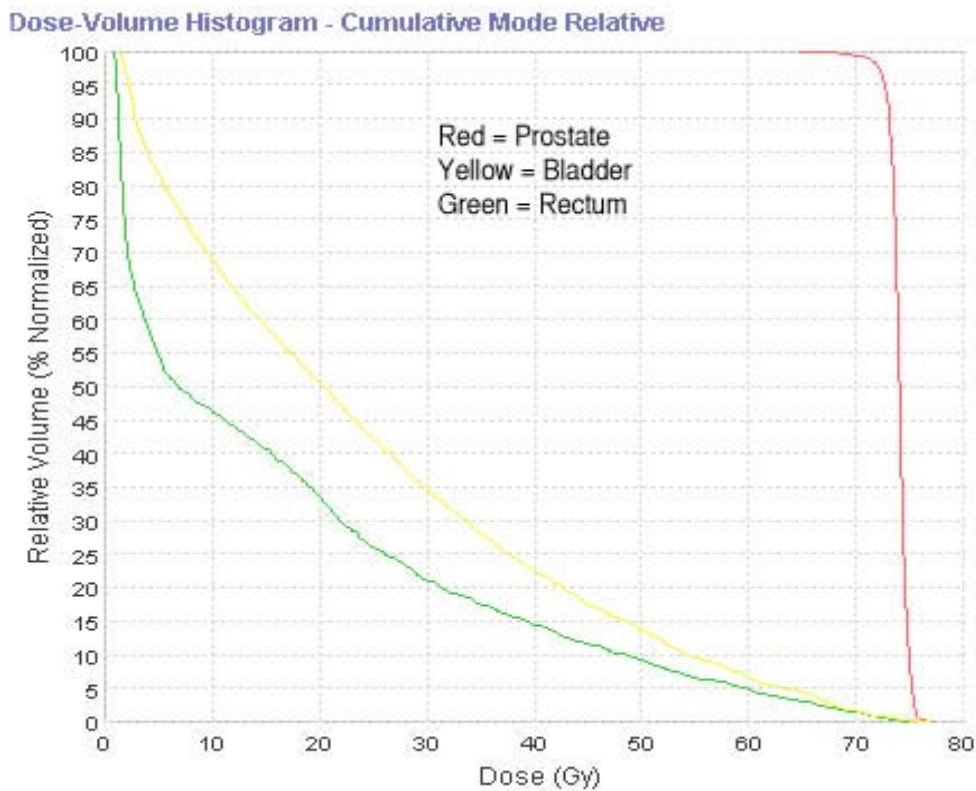


Figure 2: DVH

of a *TomoTherapy* treatment plan for prostate cancer.